

**Colorado Department of Transportation**  
**Structure Inspection and Inventory Report (English Units)**

Highway Number (ON) 5D: 470A 1

Mile Post (ON)11: 24.538 mi

Bridge Key: F-17-HN

Inspection Date: 12/14/2011

Sufficiency Rating: 94.4 Not Eligible

Rgn/Sectn 2E/2M:	68	Hist Signif 37:	5	UW Inspection Date 93B:	
Trans Region 2T:	02	Posting status 41:	A	SI Date 93C:	
County Code 3:	035	Service on/un 42A/B:	1 1	Bridge Cost 94:	\$ 0
DOUGLAS		Main Mat/Desgn 43A/B:	6 2	Roadway Cost 95:	\$ 0
Place Code 4:	45955	Appr Mat/Desgn 44A/B:	0 0	Total Cost 96:	\$ 0
LONE TREE		Main Spans Unit 45:	2	Year of Cost Estimate 97:	
Rte.(On/Under)5A:	1	Approach Spans 46:	0	Brdr Brdg Code/% 98A/B:	
Signing Prefix 5B:	3	Horiz Clr 47:	49.2 ft	Border Bridge Number 99:	
Level of Service 5C:	1	Max Span 48:	70.5 ft	Defense Highway 100:	0
Directional Suffix 5E:	0	Str Length 49:	139.5 ft	Parallel Structure 101:	R
Feature Intersected 6:		Curb Wdth L/R 50A/B:	0.0 ft 0.0 ft	Direction of Traffic 102:	1
ACRES GREEN DRIVE		Width Curb to Curb 51:	49.2 ft	Temporary Structure 103:	
Facility Carried 7:		Width Out to Out 52:	52.7 ft	Highway System 104:	1
SH 470 ML EBND		Deck Area:	7,351.8 sq. ft	Fed Lands Hiway 105:	0
Alias Str No.8A:		Min Clr Ovr Brdg 53:	99.99	Year Reconstructed 106:	0000
		Min Undrclr Ref 54A:	H	Deck Type 107:	1
Prll Str No. 8P		Min Undrclr 54B:	16.7 ft	Wearing Surface 108A:	6
F-17-HO		Min Lat Clmce Ref R 55A:	H	Membrane 108B:	2
Location 9:	328.05117409	Min Lat Undrclr R 55B:	9.0 ft	Deck Protection 108C:	1
3.5 M E OF JCT SH 177		Min Lat Undrclr L 56:	4.501312267	Truck ADT 109:	5 %
Max Clr 10:	99.99	Deck 58:	7	Trk Net 110:	1
BaseHiway Net12:	1	Super 59:	7	Pier Protection 111:	#
IrsinvRout 13A:	000000470A	Sub 60:	8	NBIS Length 112:	Y
IrrsubRout No13B:	00	Channel/Protection 61:	N	Scour Critical 113:	N
Latitude 16:	39d 33' 50"	Culvert 62:	N	Scour Watch 113M:	0
Longitude 17:	104d 53' 50"	Oprrtg Rtg Method 63:	5 No rating	Future ADT 114:	80,560
Range18A:	67 W	Operating Rating 64:	62.1	Year of Future ADT 115:	2027
Township18B:	67	Inv Rtg Method 65:	5	CDOT Str Type 120A:	CPGC
Section18C:	4	Inventory Rating 66:	37.0	CDOT Constr Type 120B:	31
Detour Length 19:	0.6 mi	Asph/Fill Thick 66T:	004 "in"	Inspection Indic 122A:	
Toll Facility 20:	3	Str. Evaluation 67:	7	Inspection Trip 122AA:	
Custodian 21:	1	Deck Geometry 68:	4	Scheduling Status 122B:	
Owner 22:	1	Undrclr Vert/Hor 69:	5	Maintenance Patrol 123:	30
Functional Class 26:	12	Posting 70:	5	Expansion Dev/Type124:	C
Year Built 27:	1984	Waterway Adequacy 7:	N	Brdg Rail Type/Mod 125A/B:	R 0
Lanes on 28A:	3	Approach Alignment 72:	8	Posting Trucks 129A/B/C:	0 0 0
Lanes Under 28B:	4	Type of Work 75A:		Str Rating Date 130:	1/24/1997
ADT 29:	53,000	Work Done By 75B:		Special Equip 133:	-1
Year of ADT 30:	2007	Length of Improvment 76:	0.0 ft	Vert Clr N/E 134A/B/C:	X 99.99 0.00
Design Load 31:	6	Insp Team Indicator 90B:	RED TEAM	Vert Clr S/W 135A/B/C:	X 99.99 0.00
Apr Rdwy Width 32:	50.0 ft	Inspector Name 90C:	RUTHERFORDI	Vertical Clr Date:	12/1/2005
Median 33:	1	Frequency 91:	24 months	Weight Limit Color: 139:	0
Skew 34:	1.00 °	FC Frequency 92A:	-1	Str Billing Type:	U
Structure Flared 35:	0	UW Frequency 92B:	-1	Userkey 1 - System:	ONSY
Sfty Rail 36a/b/c/d:	1 1 1 1	SI Frequency 92C:	-1	Userkey 7-Update Indic:	
Rail ht36h:	34 "in"	FC Inspection Date 93A:			

Inspector Name: RUTHERFORDD

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**Element Inspection Report**

Elm/En	Description	Units	Total Qty	% in 1	CS 1	% in 2	CS 2	% in 3	CS 3	% in 4	CS 4	% in 5	CS 5
26/4	Conc Deck/Coatd Bars	(SF)	7,352	0 %	0	100 %	7,352	0 %	0	0 %	0	0 %	0
109/4	P/S Conc Open Girder	(LF)	685	100 %	685	0 %	0	0 %	0	0 %	0	0 %	0
210/4	R/Conc Pier Wall	(LF)	32	100 %	32	0 %	0	0 %	0	0 %	0	0 %	0
215/4	R/Conc Abutment	(LF)	106	100 %	106	0 %	0	0 %	0	0 %	0	0 %	0
234/4	R/Conc Cap	(LF)	48	100 %	48	0 %	0	0 %	0	0 %	0	0 %	0
300/1	Strip Seal Exp Joint	(LF)	106	100 %	106	0 %	0	0 %	0	0 %	0	0 %	0
301/4	Pourable Joint Seal	(LF)	106	100 %	106	0 %	0	0 %	0	0 %	0	0 %	0
321/4	R/Conc Approach Slab	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0
325/4	Slope Prot/Berms	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0
326/4	Bridge Wingwalls	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
331/4	Conc Bridge Railing	(LF)	280	100 %	280	0 %	0	0 %	0	0 %	0	0 %	0
340/4	Superstr Cnc Coating	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
341/4	Substr Conc Coating	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
359/4	Soffit Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0

Elem/Env	Description	Element Notes
26/4	Conc Deck/Coatd Bars	4 Inches asphalt. New overlay since last inspection. Looks good.
109/4	P/S Conc Open Girder	Cracking at joint of girder ends on both exteriors over pier. Hairline to light horiz. cracks at top of web near both abutments, and near pier.
210/4	R/Conc Pier Wall	Looks good.
215/4	R/Conc Abutment	Both abutment backwalls have light vertical cracks between girders.
234/4	R/Conc Cap	Looks good.
300/1	Strip Seal Exp Joint	New strip seal joints at sleeper slabs. Both open 2 inches. Full of sand.
301/4	Pourable Joint Seal	At abutments. Covered with new overlay.
321/4	R/Conc Approach Slab	Covered with asphalt. Look good. No settling.
325/4	Slope Prot/Berms	Both slope paves have light horiz. cracks. A3 slope pave has pulled away from abutment breastwall up to 1.75 inches.
326/4	Bridge Wingwalls	Full height vertical cracks (open to 3/8 inch) in transverse portion of retaining walls at end of wings. (See 2005 Photo) Retaining wall at #3 Rt. has settled about 3.5 inches. (See 2008 Photo) Retaining wall at #3 Lt. has settled about 2 inches, and is spalling/breaking up with exposed rebar. (See 2005 Photo) Retaining wall at #1 Lt. has settled 2.5 inches, and #1 Rt. has settled 2 inches.
331/4	Conc Bridge Railing	Typ. light vertical cracks in both. Spots of light scale, and some minor scrapes and chips.
340/4	Superstr Cnc Coating	On exterior girders, overhangs, and bridge rail. Looks good.

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341/4	Substr Conc Coating	On abutments, wingwalls, pier wall, pier cap, and slope paving. Some graffiti has been painted over. Coating on slope paving creates slick surface.
359/4	Soffit Smart Flag	Hairline longit. cracks in Bays 1B and 1C. Crack in Bay 1C extends into A1 backwall. Few diag. cracks with efflor. near abutments and piers.

**Bridge Notes**

**Inspection Notes**

Time: 11:20 Temperature: 40 degrees Weather: Pt. Cloudy Team Leader: TAT

**Scope:**

☒ NBI: ☒ Element: ☐ Underwater: ☐ Fracture Critical: ☐ Other: Type: Regular NBI

Inspector: RUTHERFORDD

Inspection Team:

Inspection Date: 12/14/2011

Inspector

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